

Assignment 3: Data distribution and Linear Algebra

July 13, 2022

[Submission URL](#)

Submission Deadline: 15/07/2022, 2.30 PM

Data Distribution

1. Random Numbers

Write a program that generates a random number, x , between 1 and 50, a random number y between 2 and 5, and computes $x * y$

2. Distribution

Write your own function for probability mass function and cumulative distribution function for Poisson distribution and plot the PMF and CDF

Linear Algebra

3. Write a NumPy program to compute the sum of the diagonal element of a given array (Hint: *numpy.trace*)

Input: $m = \text{np.arange}(4).reshape(2,2)$

Output: 3

4. Write a for loop to iterate through every element of a given matrix and print them